Missouri Department of Mental Health (DMH) and Department of Social Services, Division of Medical Services (DMS), Behavioral Pharmacy Partnership Project Annual Report

March 1, 2003 through March 31, 2004

This report overviews first year activities and outcomes of the Missouri DMH/DMS Behavioral Pharmacy Partnership Project. The Project is funded through an educational grant by Eli Lilly to Comprehensive NeuroScience, Inc. (CNS), a company dedicated to improving behavioral health prescribing practices for Medicaid recipients with serious mental illnesses. Through the grant, CNS assists DMH/DMS in Project implementation.

The Project began in January 2003 through formal agreements between DMH/CNS to clarify roles and assure HIPAA compliant data transfer. Pharmacy claims are passed by DMH to CNS for monthly analysis. CNS initially reviewed pharmacy claims from January 1-March 31, 2003 to establish a baseline of prescribing practice and identify prescribing patterns falling outside nationally recognized best practice guidelines.

Dr. Joe Parks, DMH Medical Director and Dr. George Oestreich, DMS Pharmacy Director, determined areas of prescribing practice to focus educational alerts to outlier prescribers for quality improvement. Outlier prescribers are physicians writing a large number of behavioral health prescriptions, some or all of which deviate from best practice guidelines. In Missouri, 300 outlier prescribers accounted for more than 50% of the cost of approximately 250,000 behavioral health claims falling outside recommended best practice guidelines written each quarter during the first year of the Project. In addition, the Project alerts all Missouri physicians whose patients failed to refill their Antipsychotic medications in timely fashion, or if patients were prescribed multiple drugs of the same chemical class concurrently from more than one physician.

Drs. Parks and Oestreich are assisted by a Project Management Team consisting of staff from DMH, DMS and CNS, and receive feedback from a Project Advisory Board of prominent Missouri physicians and mental health stakeholders that meets twice yearly.

A statewide orientation process was conducted by Dr. Parks in March 2003 to help Missouri prescribers understand the Project's goal, which is to improve behavioral health prescribing practices and patient medication adherence by targeting education messages to physicians thereby allowing them to "self-regulate" their prescribing patterns. This avoids the need for many external Medicaid controls such as prior authorization or fail first that might limit access to psychotropic drugs.

The first Missouri prescriber educational alerts were mailed in June, 2003. They included a cover letter from Dr. Parks identifying areas of prescribing concern, patient information, drug, dosage levels, and educational monographs describing the relevant best practice guideline(s). Prescriber alert events occurred 7 times between June 1, 2003 and January 31, 2004, involving between 2,000-3,000 letters to physicians for each mailing event. The Project also employs three prominent Missouri Psychiatrists under DMH direction to answer physician inquiries and provide peer consultation.

FIRST YEAR RESULTS

Measurement of Project results consisted of determining the extent to which targeted outlier physicians voluntarily changed their prescribing patterns to conform with nationally accepted best practice guidelines, and how rapidly such changes occurred. It was also necessary to review concurrent changes in medication plans of the patients of the targeted outlier prescribers to make certain that:

1. Patient medication plan adjustments were consistent with targeted outlier prescribing pattern changes;
2. Patients were still actively enrolled in the Medicaid program; and
3. Patients were still being prescribed behavioral health drugs.

The following Tables and Charts reflect the extent and timing of change in outlier prescribing patterns in ten key Quality Indicator Areas tracked by the CNS program. For a change to be documented, prescribers had to change prescribing practice during the review period and maintain that change through the full reporting period.

Table 1: Changes in Targeted Outlier Physician Prescribing Behavior: June 1, 2003-January 31, 2004

Quality Indicator	Total Prescribers Flagged in Report Period	Prescribers Leaving Report (No Longer Flagged)	Average days until Prescriber Left Report	New Prescribers Reported during Jan. 2004	% Change: Prescribers who left Report and stayed off
Prescribers of two or more concurrent Antipsychotics	1,469	645	37	185	44%
Prescribers of three or more concurrent Atypicals	199	106	53	44	53%
Prescribers of three or more concurrent BH drugs to children	1,298	601	70	160	46%
Prescribers of Anxiolytics & Sed. Hypnotics-60 days or more	3,944	1,651	72	468	42%
Multiple Prescribers of Anxiolytics or Sed. Hypnotics to same patient concurrently	1,124	1,077	65	32	96%
Prescribers of dosages of Atypical Antipsychotics above FDA recommended levels	351	109	82	10	31%
Prescribers of dosages of Atypical Antipsychotics below FDA recommended levels	347	119	77	13	34%
Multiple Prescribers of Atypical Antipsychotics to same patient concurrently	1,112	1,065	88	8	96%
Prescribers who switch Atypical Antipsychotics too quickly for drug to take effect	249	142	65	26	57%
Prescribers of 3 or more drugs of same class-60 days or more	4,113	2,305	72	309	56%

How to Interpret Table 1: This report analyzes all prescribers who were mailed an intervention packet in Missouri since June 2003 (*the first month of the Project that the intervention could have had an effect on the prescriber for any Indicator*).

- **Total Prescribers Flagged in Report Period:** The total number of prescribers year-to-date that have been mailed an intervention for the indicator.

- **Prescribers Leaving Report (No Longer Flagged):** Number of prescribers who hit the indicator in any previous month but no longer hit the indicator in January 2004.

- **Average Number of Days Until Prescriber Left Report:** For those prescribers who no longer hit the indicator, this is the average number of days before dropping off.

- **New Prescribers Reported-Latest Month:** Number of prescribers who hit the indicator for the very first time during January, 2004.

- **Percent Change:** The percentage of prescribers who have changed their behavior and no longer hit the indicator through January, 2004.

Table 2: Changes for Patients of Targeted Outlier Prescribers: June 1, 2003-January 31, 2004

Quality Indicator	Patients Flagged by Indicator	Average days on Report	Patients No Longer on Report	New Patients-Latest Month	% Change
Patients prescribed two or more concurrent Antipsychotics	4,400	44	2,646	450	60%
Patients prescribed three or more Atypicals concurrently	175	55	75	45	43%
Children on three or more BH drugs concurrently	3,000	73	1,289	427	43%
Patients on Anxiolytics & Sed. Hypnotics 60 days or more	6,905	66	2,473	1,511	36%
Patients prescribed Anxiolytics or Sed. Hypnotics by more than 1 prescriber concurrently	796	58	769	23	97%
Patients prescribed dosages of Atypical Antipsychotics above FDA recommended levels	4,155	66	1,645	562	40%
Patients prescribed dosages of Atypical Antipsychotics below FDA recommended levels	3,937	57	2,056	695	52%
Patients prescribed Atypical Antipsychotics by more than 1 prescriber concurrently	1,330	73	1,305	17	98%
Patients involved in switching Atypical Antipsychotics too quickly for drug to take effect	638	33	453	166	71%
Patients concurrently prescribed 2 or more medications of the same class for 60 days or more	7,951	57	5,083	785	64%

See "*How to Interpret Table I*" for interpretive key to Table II columns. Substitute Patients for Prescribers.

PRESCRIBER FEEDBACK

On average, the Project received letters, phone or e-mail responses from approximately 5% of the prescribers per educational alert event. Approximately two-thirds of these responses were to inform the State that there was a problem with the claim, such as the doctor did not write a particular prescription in question or the prescriber's name or address was incorrect. These claims problems can occur due to miscoding the prescription or the prescriber identification number at the pharmacy dispensing level. It is the responsibility of DMS to see that such billing errors are corrected. The remaining one-third of the physician responses involved clinical issues handled by Dr. Parks or one of the Physician Peer Consultants.

FIRST YEAR CONCLUSIONS

The data reflects that the DMH/DMS Behavioral Pharmacy Partnership Project had significant impact on Missouri Medicaid behavioral health prescribing practices and patient adherence to their medication plans. The largest volume of change occurred in the areas of:

1. Polypharmacy across all drug classes (56% change affecting 2,305 physicians);

2. Multiple prescribers of Anxiolytics or Sedative hypnotics (96% change affecting 1,077 physicians);

3. Multiple prescribers of Atypical Antipsychotics (96% change affecting 1,065 physicians);

4. Physicians prescribing two or more Antipsychotics to a patient (44% change affecting 645 physicians); and

5. Physicians prescribing three or more behavioral health drugs to children under age 18 (46% change affecting 601 physicians).

For the patients of targeted prescribers who received educational alerts, the largest volume of change in their medication plans occurred in the following areas:

1. Patients prescribed multiple drugs of the same class concurrently--polypharmacy (64% change involving 5,083 patients);

2. Patients receiving Anxiolytics or Sedative Hypnotics from two or more physicians concurrently for more than 60 days (97% change involving 769 patients);

3. Patients on dosage levels of Atypical Antipsychotics below FDA recommended levels for minimum efficacy (52% change involving 2,056 patients);

4. Patients on dosage levels of Atypical Antipsychotics above FDA recommended levels for maximum efficacy (40% change involving 1,645 patients);

5. Patients receiving Atypical Antipsychotics from two or more physicians concurrently for more than 60 days (98% change involving 1,305 patients); and

6. Children prescribed three or more behavioral health drugs concurrently (43% change involving 1,289 patients).

The reason a higher percentage of patient change occurred than in the prescriber category was because high volume physicians prescribe drugs to multiple patients flagged by the indicators.

The results point out that the process must be considered dynamic, not static. Additional physicians from Missouri's total of 20,000 prescriber sites may begin prescribing behavioral health drugs and be flagged by an Indicator for the first time at any point during the year. This confirms the necessity for a multi-year quality improvement effort to ultimately reach the large majority of prescribers.

The study results also reflect that the number of messages necessary to cause changes in physician prescribing patterns vary by Quality Indicators. For some indicators, such as prescribing two or more Antipsychotics to a patient concurrently, the change is rapid (1-2 mailings per physician on average) but for others, repeated messages are required before physician change occurs.

CNS will continue to track prescriber and patient change resulting from the educational alerts and Physician Peer Consultations during year two of the Partnership Project.